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(54) Title: TREATMENT OF ELEMENTAL MERCURY

(57) **Abstract:** The invention concerns a method for the stabilisation and disposal of elemental mercury, the method comprising treating the elemental mercury with a cementitious particulate filler material which additionally comprises an immobilisation treatment. In a preferred embodiment, the immobilisation treatment comprises an amalgamation treatment prior to the treatment with a cementitious particulate filler material. Preferably, the amalgamation is carried out using copper powder and dilute nitric acid and the cementitious particulate filler material comprises a mixture of Ordinary Portland Cement and Blast Furnace Slag. The method of the invention is carried out conveniently and rapidly, and the end product, after allowing to cure, is non-toxic, insoluble in water, easily handled, and immediately suitable for disposal. The method is particularly applicable to the safe disposal of elemental mercury which is contaminated with radioactive materials.



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